



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,364	01/14/2002	Joachim Wagenblast	Mo6655/LeA 33,721	5085 7
157	7590	10/03/2003	EXAMINER	
BAYER POLYMERS LLC 100 BAYER ROAD PITTSBURGH, PA 15205			NORDMEYER, PATRICIA L	
			ART UNIT	PAPER NUMBER

1772

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/047,364

Applicant(s)

WAGENBLAST ET AL.

Examiner

Patricia L. Nordmeyer

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Withdrawn Rejections***

1. The claim objection to claim 5 of record in Paper #5, Page 2, Paragraph 1 has been withdrawn due to Applicant's amendment in Paper #6.
2. The 35 U.S.C. 102 rejection of claims 1 – 3, 6 – 10 and 12 – 14 as anticipated by Bien of record in Paper #5, Pages 2 – 4, Paragraph 3 has been withdrawn due to Applicant's amendment in Paper #6.
3. The 35 U.S.C. 102 rejection of claims 1, 4 – 6, 7, 9 – 11 and 14 as anticipated by Muehlhausen of record in Paper #5, Pages 4 – 5, Paragraph 4 has been withdrawn due to Applicant's amendment in Paper #6.

### ***New Rejections***

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 1 – 3 and 5 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bien (USPN 4,973,102) in view of Burns et al. (USPN 3,458,618).

Art Unit: 1772

Bien discloses a core body made from metal with a plurality of perforations (Column 5, lines 58 – 60 and Figures 3 and 5, #16). A plastic part made from thermoplastic material rests against the metal body (Column 6, lines 1 – 4 and Figures 3 and 5, #14). The two pieces are joined together by joining elements, bolts (Column 5, lines 66 – 68 and Figure 4, #39) or rivets (Figure 4, #72) that extend perpendicularly through the perforations. The openings and joining elements allow the plastic panel to slide relative to the metal substructure due to different thermal expansion characteristics (Column 3, lines 11 – 17). The metal strip contains elongated holes (Figure 3 and 6, #24a-d and Column 5, lines 46 – 48), which allows for thermal expansion of the plastic part (Column 4, lines 12 – 17). As can be seen in Figure 5, the openings have a larger dimension in both the x and y directions than the joining elements to allow for expansion. A circular hole (Figure 6, #27) exists in the metal strip as a fixed joining element since both holes have matching diameters (Column 7, lines 60 – 62). The article formed with the composite of plastic and metal is a structural article such as a part of an automotive vehicle body (Column 1, lines 5 – 11). However, Bien fails to disclose the joining elements being thermoplastic rivets that are continuous with said plastic part, the thermoplastics material of the plastic body being selected from polyamide, polyester, polyolefin, styrene copolymer, polycarbonate, polyphenylene oxide, polyphenylene sulfide, polyimide, polysulfone and polyetheretherketone, and the plastic rivet joining elements have a rivet shaft and a rivet head, said rivet shaft extending through said perforation and said head forming said interlocking engagement between the core body and plastics part that is perpendicular to the plane of the core body.

Art Unit: 1772

Burns et al. teach polyamide and polyolefin material (Column 5, lines 14 to Column 6, line 3) used to form continuous thermoplastic rivets (Figure 4 and 6) with the plastic upper member (Column 1, lines 17 – 18) and the metal lower member, which contains openings (Column 2, lines 25 – 31), wherein the rivet has a head and shaft, where the shaft extends through the opening in the lower member (Figures 4 and 6) for the purpose of forming an interlocking engagement between the two pieces of material that is perpendicular to the plane of the body for use in automobiles (Column 3, lines 44 – 60).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the continuous thermoplastic rivets in Bien in order to form an interlocking engagement between the two pieces of material that is perpendicular to the plane of the body for use in automobiles as taught by Burns et al.

Regarding the limitation of injection molding the plastic portion on a part of the core body and the joining elements being formed at the same time in claim 9 and the limitation of prior to injection molding, the perforations being filled by removable cores to inhibit the edges of the perforations being embedded in plastics and then removing the cores in claim 10, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitation of injection molding and the steps that go with said process

Art Unit: 1772

are methods of production and therefore do not determine the patentability of the product itself. Process limitations are given little or no patentable weight. The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bien (USPN 4,973,102) in view of Burns et al. (USPN 3,458,618) as applied to claims 1 – 3 and 5 – 14 above, and further in view of Cheron et al. (USPN 6,547,317).

Bien, as modified with Burns et al., discloses the claimed composite material made a high strength core body and a thermoplastic material abutting a portion of the body. However, the modified Bien fails to disclose the plastic part forming a rib structure having a plurality of intersecting ribs, said joining elements being located at the intersections of said ribs.

Cheron et al. teaches a rib structure having a plurality of intersecting ribs (Figures 8 and 9) made from thermoplastic material (Column 2, lines 56 – 58) where the thermoplastic material is attached to metal reinforcement (Column 2, lines 51 – 52) with a variety of fasteners (Figures

Art Unit: 1772

10A – 11 and 13A – 13C) at intersection (Column 2, lines 11 – 15) for the purpose of reinforcing the plastic part in a structural part of a motor vehicle.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the joining element at the intersection of the plurality of ribs in Bien in order to reinforce the plastic part in a structural part of a motor vehicle as taught by Cheron et al.

### *Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1772


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (703) 306-5480. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (703) 308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Patricia L. Nordmeyer  
Examiner  
Art Unit 1772

*pln*  
pln

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
*1772*

*9/10/03*